

## PLA2G2E

## Recombinant Human PLA2G2E/Phospholipase A2-IIE His

**Catalog No.** CSI12702 **Quantity:** 2 μg

CSI12703 10 μg CSI12704 1.0 mg

Alternate Names: Group IIE secretory phospholipase A2, EC 3.1.1.4, Phosphatidylcholine 2-acylhydrolase

GIIE, GIIE sPLA2, sPLA(2)-IIE, sPLA2-IIE, PLA2G2E.

**Description:** Phospholipase A2 (PLA2) catalyzes the hydrolysis of the sn-2 position of membrane

glycerophospholipids to liberate arachidonic acid (AA), a precursor of eicosanoids including prostaglandins and leukotrienes. The same reaction also produces

lysophosholipids, which represent another class of lipid mediators.

The secretory PLA2 (sPLA2) family, in which 10 isozymes have been identified, consists of low molecular weight, Ca2+-requiring secretory enzymes that have been implicated in a number of biological processes, such as modification of eicosanoid generation, inflammation, and host defense. This enzyme has been proposed to hydrolyze phosphatidylcholine (PC) in lipoproteins to liberate lyso-PC and free fatty acids in the arterial wall, thereby facilitating the accumulation of bioactive lipids and modified

In mice, sPLA2 expression significantly influences HDL particle size and composition and demonstrate that an induction of sPLA2 is required for the decrease in plasma HDL cholesterol in response to inflammatory stimuli. Installation of bacteria into the bronchi was associated with surfactant degradation and a decrease in large:small ratio of

surfactant aggregates in rats.

lipoproteins in atherosclerotic foci.

Secreted Phospholipase A2-IIE Human Recombinant manufactured with N-terminal His-Tag. PLA2G2E His-Tagged Fusion Protein is 15.8 kDa protein containing 123 amino acid residues of the human secreted phospholipase A2-IIE and 16 additional amino acid

residue

**Physical Appearance:** Sterile Filtered lyophilized (freeze-dried) powder.

 Gene ID:
 30814

 Source:
 E. coli

 Molecular Weight:
 15.8 kDa

Formulation: Sterile filtered and lyophilized from 0.5 mg/ml in 0.05 M Acetate buffer pH-4.

**Purity:** Greater than 95% as determined by SDS PAGE.

**Purification Method:** Ni-NTA affinity chromatography.

**Specificity:** The amino acid sequence of the recombinant human Secreted Phospholipase A2-IIE is

100% homologous to the amino acid sequence of the human Secreted Phospholipase

A2-IIE without signal sequence.

Amino Acid Sequence: MRGSHHHHHH GMASHMNLVQ FGVMIEKMTG KSALQYNDYG CYCGIGGSHW

PVDQTDWCCH AHDCCYGRLE KLGCEPKLEK YLFSVSERGI FCAGRTTCQR

LTCECDKRAA LCFRRNLGTY NRKYAHYPNK LCTGPTPPC.

**Reconstitution:** Add 0.2 ml of 0.1 M Acetate buffer pH-4 and let the lyophilized pellet dissolve completely.

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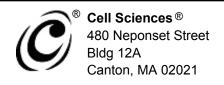
Fax: 781-828-0542

For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10  $\mu$ g/ml. In higher concentrations the solubility of this antigen is

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limited.

**Applications:** Western blotting.



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Storage & Stability:

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to **avoid repeated freezing/thawing cycles**. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

The lyophilized protein remains stable until the expiration date when stored at -20°C.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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